OBSERVATIONS

ON THE

UTILITY OF *PATENTS*,

AND ON THE SENTIMENTS OF

LORD KENYON

RESPECTING THAT SUBJECT.

INCLUDING

FREE REMARKS

ON

MR. *BEETHAM's*

PATENT WASHING MILLS;

AND

HINTS TO THOSE WHO SOLICIT FOR

PATENTS.

LONDON:

PRINTED FOR RIDGWAY, YORK STREET,
ST. JAMES'S SQUARE.

MDCCXCI.

BRITISH MUSEUM

44
3 29
604

TO THE

PATENTEES,

AND TO THE

INGENIOUS MANUFACTURERS

OF

GREAT BRITAIN;

THESE OBSERVATIONS,

WRITTEN IN DEFENCE OF THEIR

RIGHTS AND PRIVILEGES,

ARE RESPECTFULLY INSCRIBED.

BRITISH
MUSEUM

ADVERTISEMENT.

IN submitting the following brief OBSERVATIONS *to the candour of the Publick, the Writer's intention is not so much to challenge an assent to his opinions, as to solicit an investigation on the subject of his inquiry. This is an age no less distinguished by a spirit of useful disquisition, than by a liberal encouragement of whatever may tend to give effect and permanency to such efforts of Ingenuity as may prove beneficial to Society. If that object can be attained by any better mode than by* PATENT, *the Talents of the Country demand it: and if these* OBSERVATIONS *contribute in the least towards so desirable an end, the wishes of the Writer will be amply gratified.*

MUSEUM

OBSERVATIONS

ON THE

UTILITY OF PATENTS, &c.

IT is a felicity almoſt peculiar to this country, that it not only produces many eminent perſons, but holds out encouragement to men in every ſtation to diſtinguiſh themſelves by uncommon exertions of natural genius, or intenſe application of acquired ſkill. And ſuch is the happy conſtitution under which we live, and ſuch more particularly the temper and diſpoſition of the preſent age, that real Genius, in whatever department, ſeldom fails of its reward.* What ſeems to have been little known, or, if known, little attended to in many countries, is, among us, almoſt become proverbial; that the arts and ſciences, which civilize mankind, and give a poliſh to life, are never found in their native vigour, and producing their true effects, but in a land of freedom.

* Perhaps I ought to except POETRY.

THE present century has been remarkable for an accumulation of ingenuity in favour of the comforts and conveniencies of society. Speculation has given way to practice; and ingenious men, no longer content with merely amusing themselves and the curious, have dedicated their talents to the real service of mankind. The arts and sciences, like every thing else, have their natural progression from infancy to maturity; and as vegetation is more attractive in Spring than in Autumn, and blossoms excel fruit in variegated beauties; so the ornamental arts are generally too much, and too long admired; their Spring is somewhat too lasting. Men, however, when they have sufficiently gazed at the wonders they have been contemplating, at length begin to inquire after the utility as well as the beauty of the objects pressed upon their notice.

IF I might be permitted to continue the allusion, I should not hesitate to say, that in this country, the arts are in their meridian.

dian, or Summer splendour: and that we may reasonably expect a moſt abundant Autumn.

THE equal progression of every science under one government, is the strongest argument in favour of that government. The banner of Liberty is never so happily employed as in protecting Genius from the scorching rays of Despotism on the one hand, and the freezing frowns of Barbarism on the other: and it is under that banner that our arts and sciences have been fostered and preserved, till they have spread sufficiently to defend the banner itself from the profane touch of unhallowed hands.

WHILE it has been, and still is, the policy of many governments to suppress the spirit of Freedom, by impeding the progress of Knowledge, and to cherish the darkness of Ignorance by excluding the light of Liberty, it has been the honour and

the boast of this country, not only to sanction, but to encourage both. Hence the amazing distinction between this, and some other kingdoms in the happiness of their subjects: hence the extent of our commerce abroad, and of our riches at home: hence that peculiar feature of the national character, uniting the bravery of ancient, with the polish of modern times: and hence that spirit of industry and ingenuity which pervades all ranks, and occasions those transitions from obscurity to eminence, and from adversity to prosperity, which strike the imagination as the effect of magick rather than the happy result of talents and vigilance united.

In a free country the Publick are ſure amply to reward all those efforts of ingenuity which contribute to their immediate interest or amusement. Thus, in the liberal professions wealth is seldom deaf to the voice of eminence, and honour treads on the heels of wealth.

THE Pulpit, the Bar, and the Stage offer golden harvests to those, who, to strong natural genius add great assiduity; while health, being the most important of all human blessings, insures to him who preserves or repairs it, equal distinction. And though all theſe profeſſions, particularly that of phyſick, have heretofore been miserably disgraced with divers species of mummery, such is the dissemination of general knowledge among all classes of people in this country, that genuine simplicity has made some inroads into the internal parts of all the sciences, and it is to be hoped will, ere long, be centred in the heart of each.

BUT though mankind are ready enough to support those professions which gratify their daily wants, or add to their recreations, there is another denomination of men whose inquiries being more abstruse, and their discoveries equally beneficial, the legislature of this country has taken under its more immediate

mediate protection, vesting in the CROWN a prerogative to reward Ingenuity by conferring upon it exclusive privileges for a term of years. This is the greatest and most effectual incitement that can be contrived not only to recompense Ingenuity, but to keep it always on the wing in search of new discoveries; every one of which must inevitably, in some respect or other, tend to the benefit of the community at large: for, though an invention, in the first instance, be incomplete, the operations produced by it may give rise to other inventions both of a similar and dissimilar nature, more complete and more important.

To the encouragement held out by PATENTS, then, we owe some of the most valuable inventions which the various and astonishing powers of mechanicks have produced. And when we consider the vast increase of our commerce, and its consequent luxury, it will not appear wonderful that Patents have been solicited and obtained

tained for a variety of articles which ſcarcely ſeem worthy of ſuch diſtinction. Emulation, as well as the hope of riches, is no ſmall ſpur to the ingenious; and there is a ſort of rage for making fortunes rapidly, in order to keep pace with the luxury of the times, which has given birth to ſuch an enormous number of Inventions and Patents, that it is now become a ſerious queſtion, whether Patents are more beneficial or prejudicial to the community at large; and the preſent LORD CHIEF JUSTICE of the Court of KING'S BENCH is decidedly of opinion, that Patents are hurtful to ſociety: an opinion which I have before heard advanced for the ſake of argument, but which I never expected to hear gravely delivered from the Bench.

I HAVE great deference for the legal opinions and deciſions of Lord KENYON. But I muſt take the liberty of ſaying, that I differ widely from his Lordſhip on the ſubject of theſe obſervations. From what his

his Lordship said in a late cause,* I apprehend his principal objection to Patents is founded on an idea, that by giving one man an exclusive privilege to make a species of instrument, a peculiar buckle, for instance, or part of a buckle, "the hands of "the working tradesmen in the same "business are tied up;" they are afraid to pursue their occupation lest they ſhould infringe on the rights of the Patentee; and that, by this means, a single individual holds the rod of litigation over thousands of the same trade, who are deterred from getting their livelihood, fearing they should be involved in prosecutions at law.

BUT, with submission to his Lordship, these are groundless fears. The Patentee being under the necessity of describing in his Specification the nature and form of his invention in all its parts; and being also under the necessity of taking his Patent for such parts only as are actually new and

* The King against Eley,

of

of his own invention, he cannot possibly, even in the moſt complicated mechanism, deprive others of making such instruments as were in use before his invention took place. And it would be extremely singular indeed, if those of the same trade, and accuſtomed to making instruments or machines of the same nature, could not possibly discover the difference between the new and the old parts, and avoid making ſuch for which a Patent had been obtained.

In the case above alluded to, the Patent was justly set aside, not because the Patentee had nothing new in his invention, but becauſe he took a Patent for more than he was entitled to: he took his Patent for a new-invented buckle; whereas he ſhould have taken it only for that specifick part of the buckle which he had invented, and which was but an addition to a buckle, to make it sit easier on the foot, or to faſten it in a particular way.

His Lordship complained of the number

of Patents. He ſaid, we could not look into the news-papers of the day, without being aſtoniſhed at the numerous advertiſements of articles for which Patents had been granted; ſo many, indeed, that they were become a publick evil, a nuiſance; and he expreſſed a wiſh that ſome means were adopted to ſtop their progreſs.

If there is any actual grievance ariſing from Patents, I am of opinion, that it does not extend to the publick, nor yet to men of the ſame profeſſion as the Patentees, but to the Patentees themſelves, who, if their inventions are worthleſs, will meet with little encouragement, and probably loſe the money ſpent in procuring their Patents. And in this manner, I am perſuaded, many Patentees are puniſhed as ſeverely as his Lordſhip could wiſh. On the contrary, if an invention is of real utility, the publick have that natural love for genius, and that veneration for private right, as not only to ſupport, but to applaud the inventor, and

deem

deem him well entitled to the exclusive privileges with which a Patent invests him.

THE number of frivolous articles for which Patents are obtained is, indeed, matter of surprize; but I cannot discover why it should be matter of reprehension. It loudly declares the riches of the country; since many of the most contemptible of these productions bring an accession of wealth to the inventors; and in a way that cannot be injurious to the publick; for such Patents are merely taxes upon luxury, and taxes too that no man need pay against his consent.

IN what respect, then, can Patents be deemed a publick evil?—It may, perhaps, be said that the Publick are too long deprived of the free use of a profitable article, at a moderate rate; too long obliged to pay the stated price of the Inventor. But to this it may be replied, that if the article is of so much real utility, the inventor surely

is entitled to all the advantages a Patent can give him; and if he is wise enough to avail himself of these advantages, the publick will have no reason to complain of the price at which he may value his article, because he will find his success and his profits bear a due proportion to the reasonableness of his demand; for, after all, the publick, from whom his reward is to come, have it in their option to purchase or to decline purchasing.

No man, I believe, wishes Ingenuity to pass unnoticed. All know that the labourer is worthy of his hire; and all feel that the man merits some gratuity, who, by a happy effort of his skill, adds to our comforts or conveniencies. But many have wished that some other mode were adopted to excite emulation and industry, than the granting of Patents. It is said, let the Inventor have his recompense from a publick fund: let the Government reward him, and let the People instantly enjoy the benefit

of

of his ingenuity. All this is easily said: but there arises a difficulty here which seems to have been overlooked; and I contend that it is not possible to adopt the idea suggested. It would require more ingenuity in a legislator than the ingenuity of the whole body of Patentees united, to carry this scheme into effect, without inconceivable injury to private property: for, WHO are to be the proper judges of the merit of an invention; and who shall limit the sum at which it ought juſtly to be eſtimated?—If a Board were appointed to take new inventions into consideration, and to determine the value of each, how many errors would they unavoidably commit, and with what injuſtice, however unintentional, would they perpetually decide! To an invention of an apparently very trivial nature, they would scarcely pay any regard; or, observing in it some degree of acuteness, might allot to the inventor a complimentary medal, or a small gratuity: when, it is possible, the publick, in the course of fourteen years,

might

might render him independent: because no individual can judge how far a contrivance, though it were but to supply the place of a button, may chance to gratify the publick: and as it is, generally speaking, mere chance, the whim and caprice of the day, that gives to many things their importance, so those who could not possibly foresee the effects of chance, could not possibly adjudge the proper reward to that variety of subjects the success of which would so frequently depend on fortuitous circumſtances.

MEANS cannot be devised for distributing the just recompense due to every invention. Few men would be satisfied with the decision of any body appointed to adjudge their merits. Thus mechanical genius would be loſt: the stimulative of exclusive right no longer operating, there would be an end to invention: an object of much more serious alarm to the country than the danger of increasing litigation by the granting of Patents.

SINCE

SINCE then no mode has been pointed out by which mechanical productions can be appreciated, but that of submitting them to the Publick, and reaping the benefits arising from a Patent; and since the Publick decision in these cases, is sure to be juſt, let us hear no more of the inutility of Patents; at leaſt till they who make the objection have found the remedy.

IF persons of the same trade find themselves aggrieved by Patents taken for any thing already in use, their remedy is at hand. It is by a writ of *Scire Facias*, and though Juries are, very properly, extremely cautious in giving a verdict which may annul a Patent, yet, where such Patent is not well founded, as in the inſtance already mentioned, there is no danger of an individual reaping profit to the detriment of a community. This mode of setting aside Patents would be much more common were the objections againſt them so cogent as we are taught to believe. Such, however, is the

the regard the Public have to private right, that the Patentee who has been careful in his specifick description has little to dread from any opponent: And this is evident from the scarcity of cases that come before the Courts upon this principle. The litigation arising from Patents is chiefly in their defence, and to punish that spirit of invasion on exclusive right, that baleful star of envy and malignity which always sheds its noxious influence on rising merit, and which I heartily wish it were in the power of the law to expel from the gloomy hemisphere of the human heart.

On this subject I cannot gratify myself or the reader more than by quoting the sentiments of a Gentleman* conversant on these subjects, and who is himself the Patentee of several truly ingenious productions. He wrote at a time when the Patentees

* Mr. March, No. 230, Temple Bar, who has a *Patent* for a Machine to manufacture knotted and double-looped work:—A *Patent* for a Machine to manufacture knit-velvet and fancy-work:—A *Patent* for a machine to ſpin wool, &c.—and a *Patent* for a Machine to manufacture Lace, Platted work, Chain-net Lace, Fiſhing-nets, Network, Lines, Ropes, &c.

tees in this country were much alarmed on the subject of the Irish propositions. Of this writ of *Scire Facias*, and of a body of men who, it seems, had subscribed large sums in order, through it, to attack every beneficial Patent, he thus expreſſes himself:

" If that mode of proceeding is coun-
" tenanced, there will be an end to inven-
" tion, and the mechanical genius of this
" country will sleep. It is the certainty of
" an exclusive right by which mechanicks
" are stimulated to exercise their reſpective
" abilities; when that right ceases to be
" protected, new inventions will likewise
" cease. Where is that Specification,
" however guarded, that will ſtand a ge-
" neral attack for fifteen hours? Men are
" always to be found who are ready to
" *prove* what never was. A ſtrong *disci-*
" *plined* force will at all times overcome
" an individual *right* or *wrong*; but where
" is the merit? — If men are permitted to
" claim a prior right to *distinct* parts of a

" compound machine as the original in-
" ventor, but which parts, in fact, existed
" from the first foundation of things, there
" is no invention but what may be claim-
" ed. The queſtion I would ask such men
" is, If they first united the several parts of
" the machine, to produce the effect an-
" nounced by the Patent? If they did not,
" with what degree of propriety can they
" be considered as the inventors? It is not
" possible for any man, however great his
" genius may be, to create a new mecha-
" nical power*; consequently new inven-
" tions muſt consist of new effects, modes,
" or ways, to be produced by old things,
" selected and put together for that pur-
" pose: Unless inventions are taken upon
" that ground, and I do not see upon what
" other ground they can be taken, no man
" will beſtow his time and property upon
" improve-

* The ſimple machines, uſually called *mechanical powers*, are ſix in number, viz. the LEVER, the WHEEL and AXLE, the PULLEY, the INCLINED PLANE, the WEDGE, and the SCREW.

FERGUSON.

" improvements, since his success may be
" attended with ruin, which never fails to
" be attempted by vexatious law-suits to
" deprive him of his invention. What
" man, rather than be so harrassed, will
" not prefer the flattering proposals of
" foreigners, which are daily held out?
" The laſt forty years have produced more
" new inventions than centuries before.
" They have given life and vigour to the
" manufactures and commerce of this
" kingdom; they have not only been the
" chief support of landed property, but
" they have also in a great measure enabled
" trade to support the present additional
" burdens. Are objects of such national
" consequence unworthy of protection?
" Are new inventions to be *torn* up by the
" *roots*, by those who ought to protect and
" defend them? Is the *rigid* letter of the
" *law* to be exercised, instead of equity,
" againſt the moſt useful set of men this
" or any other country could ever boaſt of?
" Men whose inventions give employ to

" hundreds of thousands? If new inven-
" tions are not to be protected, ENGLAND'S
" SUN IS SET."

SUCH are the sentiments of this intelligent writer; and such will be the sentiments of every man who duly considers the importance of the subject, and the impossibility of duly and justly recompensing, otherwise than by Patent, the labours of him who, after much study and much expence, great loss of time and indefatigable exertion, at length produces something which is to benefit mankind, but which, if a Patent is refused him, can be of little, if of any advantage to himself. The Genius and the Generosity of this Country, its equity and its love of right, will, I truſt, prove insurmountable barriers to any innovation which may leave the speculative and private property of one man to be limitted and determined by the private judgment and the random decision of another.

THE legislature have always thought differently on this matter: and leſt an exclusive right should be deemed an insufficient reward to ingenuity, they have, as in the case of the Longitude, held forth the temptation of a capital fortune, as a further excitement. It would be impossible for the same legislature to hold out specifick rewards for every useful invention; because though the "omnipotence" of Parliament can and does determine many things wisely, it could never adjudge with accuracy any subject whose utility and importance may depend on the fluctuations of publick taste. The decisions of its wisdom would often prove folly, except in inventions of infinite national consequence, and even on those there is every reason to imagine it would not unfrequently be divided: Because many things, appearing trivial in the estimation of a Parliament, or a body of learned men, might in themselves be found not only of universal utility, but of inestimable value to the publick at large.

As an apposite and undeniable instance of this, I may adduce Mr. *Beetham's* WASHING MILLS: I mention those of Mr. Beetham, because, though several machines are exhibited for facilitating the washing of linens, &c. I have found none but these free from the objections to which such engines have generally been found liable, and on which account they have been abandoned as hopeless; and I mention these Mills not only as individually beneficial, but as they may be rendered inſtruments of national utility.

THE numerous schemes which have been attempted to abolish the drudgery to which the female sex is exposed by the common method of washing, and the encouragement given to even the moſt imperfect productions of the kind, plainly declare the sentiments of the Publick on that subject. Variety of engines, and of various denominations, have been constructed to effect this desirable purpose.

But

But it was reserved to the present time to give the world complete satisfaction in this point. The machines heretofore invented, have all had their partial merits, and their partial benefits. But while one purpose was accomplished, another was defeated. What one machine gained in time, it loſt in expence. Another pretending to obviate that objection, and to reduce the expence, soon deſtroyed the articles by friction, and often by laceration. Another, free from these disorders, was too complicated to be kept in repair; and, when in repair, would operate only on particular articles. In short, so many plans have been adopted, and so many disappointments have crushed them, that great part of the publick, tired of purchasing, and even of discoursing on what all were anxious to obtain, would scarcely believe, were it not to be seen, that an instrument, in the form of a *Portable Mill*, is at length completed, which not only answers every proposed purpose of a machine for washing, free from

from every objection of labour, and of mechanical defect, but so as to wash as much in one hour as any ten women, or any other two machines; and to wash as much for Five shillings as would, in the usual mode, amount to One guinea. Yet such is the fact; and the wonder will cease, when it is considered to what extent ingenuity has carried the powers of mechanism; and how often men suddenly accomplish by one power what may have been long attempted in vain by another.

I MENTION, in the first instance, the saving of time and expence, because though few, comparatively, can judge of elaborate descriptions of mechanism, every one can form an idea of utility from effect. Nor is it my intention to enter into a minute inveſtigation of the conſtruction of these Mills, because, being open to general inſpection, the Publick have an opportunity of acquiring a more perfect knowledge of the construction by the observation of a few minutes,

minutes, than I should be able to communicate in several pages. I will briefly remark in the words of the Patentee, which I have found fully verified, that this Mill " is so simple in its construction, so easy " in its management, so economical in its " principle, so safe in its operation, and so " extensive in its effects," as totally to obviate all those difficulties and objections which have arisen against former inventions of the same kind.

THE principle upon which this Mill operates is that of equal *Pressure* caused by the turning of a wheel; but pressure only, as some humble Imitators have found, will not produce the desired effect; so that besides the pressure, the rotation of the wheel, which causes the pendulum to vibrate not less than one hundred and twenty times in a minute, has the effect also of *turning* the linen incessantly. Most of the early inventions for washing went entirely upon the principle of violently turning or work-

ing the linen, and that to such a degree as to wear and tear it. The present invention has given rise to working by pressure; but pressure without turning the linen, cannot make it clean, unless the pressure be to such a degree as materially to injure, and speedily to destroy what is meant to be cleansed and preserved.

"THIS invention," as stated in the Specification, "is so constructed as to press "the articles with great force, while it "cleanses them without the least injury to "the finest lace: the pressure is effected so "quickly, by means of turning the crank "and fly with the winch, that it gradually "and incessantly turns the cloaths, &c. "and by that means changes their situa-"tion, so as to admit the water, suds, &c. "to work through, open, and dilate the "articles in the machine while they are "cleansing."

FROM this short description, aided by the

the elegant Plate annexed, with which I am favoured by the Patentee, the reader will be able to form some judgment of the process. He will readily comprehend, that from its simplicity, the mill cannot easily be put out of order; from the facility of its operation, it will be found that a child may work it with ease; and that, being entirely free from friction, it not only cleanses, but actually preserves the articles; not affecting them, in point of injury, in any degree equal to scrubbing them with the hands. As to the principal defect of all other machines, that they will not wash fine muslins, lace, &c. without destroying them, I cannot help noticing here a fact which I have more than once witnessed, and which effectually obviates all possible objection to the Mill in this respect. The Patentee does not merely throw into it, the fineſt cambrick, muſlin, or lace, but, what it would be madness to attempt washing by hand, he throws in *Bank Bills*, which so far from

ſuffering from the great force of the preſſure, or from their inceſſant turning, that they are not only ſafely recovered, but, from that property in the mechaniſm which dilates the articles, every caſual perforation, inſtead of being extended, is perfectly cloſed. Beſides the peculiar advantage of its action being ſo extremely even and uniform as not to endanger any article, however delicate, it has another of no ſmall importance in point of colour and preſervation, and not to be attempted by the hand, which is that of waſhing with boiling water. From all which circumſtances, atteſted as they are by demonſtration, the ſtatement abovementioned of the ſaving of Sixteen ſhillings out of a Guinea, in point of expence; of Nine hours out of Ten, in point of time; and totally abolishing a dreadful ſlavery by ſubſtituting a ſimple and an eaſy operation, will no longer appear incredible. Incredulity, indeed, is hard to conquer, and many are unwilling to believe that which they have

If economy be neceſsary, or cleanlineſs desirable, this is the way to obtain it.

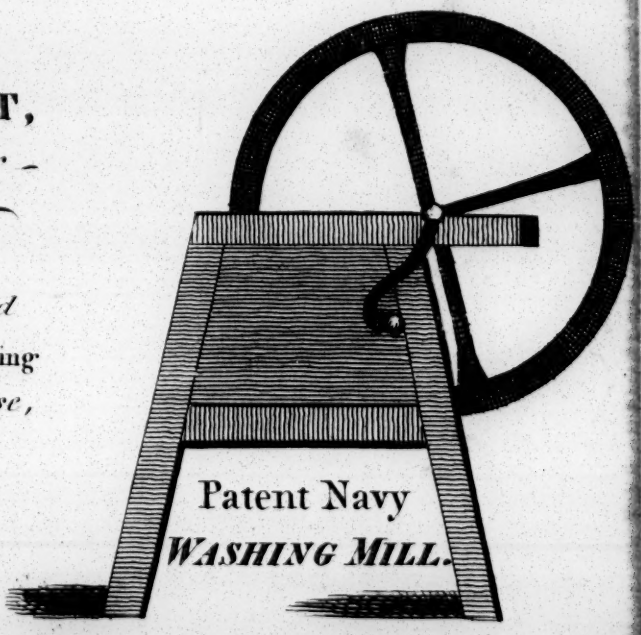
BEETHAM's *Royal Patent* WASHING MILL.

N.o 27 Fleet Street London.

PATENT CHAIN NET,

For wringing, facilitates their almost immediate drying.

The Navy-Mills are respectively Sold for the same prices as the Washing Mill *&c. now so universally in Use, on Shore.*



Patent Navy *WASHING MILL.*

1.st These Mills *render the Linen* Whiter & Cleaner, *than it can be made by any other Method.*

2.d *They will Wash more in one Hour than* Ten Women *or any other* Two Machines *can in the same time.*

3.dly *They are so saving, that for* Five Shillings *they will wash as much as will cost* One Guinea *in the common Mode.*

Lastly The Price of a Mill is very soon cleared, by what it saves in Soap, Coals, Manual Labour & the Preservation of the Linen.

This Invaluable Invention may be seen from 11 'till at M.r Beetham's *Warehouse every Day.*

BRITISH
MUSEUM

have not capacity to comprehend*. But as few can resist the evidence of their own senses, they may turn from these pages to the

* It will not be deemed impertinent if I here insert the opinion of one much abler than myself to speak on this subject; I mean Mr. March, a gentleman whose sentiments I have already quoted, and whose Letter to Mr. Beetham, now published, is as follows:

Mr. Beetham, *Barnstaple, August* 10, 1790.

"As my time and property have for near thirty years been employed in inventions and improvements, I think it a duty incumbent on me to say, that your *First Patent Washing Machine* had its merits; but, in my opinion, your *Second* Invention, the *Washing Mill*, is not to be improved. The advantage of cleansing by pressure frequently occurred to me—your method to that effect is so complete, *that it will not injure a cobweb*; it struck me, that washing and wringing by hand, in the common way, wore and tore the Linen, &c. very much, and required the power of strong men to make them clean. You have eased the lower class of females from a scene of drudgery they have too long experienced; and, at the same time, you have effected an immense saving to the publick at large.

"The great encomiums wrote me of that you sent to my House at *Temple Bar*, induced me to pay attention to that you sent me here; I had the pleasure to discover that your *Mill* turns the Linen, &c. every revolution of the winch, and by that means cleans all parts effectually. Before Mrs. March had your *Mill*, she employed three women *full eighteen hours*; by means of your *Mill*, the whole is performed much better in

seven

the conduct of the Patentee, "who, by "publick advertisement, has invited, and "continues to invite, the most minute and "ſtrict inſpectors to examine the qualities "of his invention; and undertakes to "prove, by publick trial at his House *, "that the work is light, that ſoap is ren-"dered almoſt uſeleſs, that the operation "is ſpeedy, and that the beauty of the "finest linen is kept in entire preſer-"vation."

I HAVE ſtated these facts on the ſubject of the WASHING MILLS, not ſo much to recommend them to the publick, for the

ſeven hours, by one ſervant, and a girl to turn the Mill, aged 11 years. Several children of ſix, ſeven, and eight years of age, have each worked the Mill, full an hour, for their amuſement; in ſhort, what with the great ſaving of Mill-waſhing, the number of *plagues got rid of*, &c. Mrs. March would not be without it for twenty times its coſt; I ſhall embrace every opportunity of recommending it.

I am, SIR, Your moſt obedient Servant,

R. MARCH."

"Mrs. M. ſays that the clothes dry in one third of the time, by means of your Wringer."

* No. 27, FLEET-STREET.

publick must and will judge for themselves, as to elucidate what I have already advanced on the impossibility of an individual, or a body of men, forming just ideas of the value of inventions; and to shew that what might be slightly passed over in such estimation, might be found of great national utility.

And here I cannot but earnestly recommend to the Right Honourable the Lords of the Admiralty, and to the Commissioners of the Navy, an object of infinite magnitude to the welfare of those Fleets which are the best bulwarks of this country,—I mean the *Health of Seamen*. Cleanliness is the very handmaid of Health, without whose aid she cannot long subsist; and Cleanlineſs on board a ship it is extremely difficult to preserve. Now, the ingenious Patentee of the Washing Mill has constructed one particularly adapted for the use of the Navy. Possessing the advantages of the Mill already so much distinguished,

and

and reduced to the size and form of a common chest, it will have the advantage of keeping clean the whole ship's company at a very trifling expence, and with less labour than it is easy to conceive, or possible to state with accuracy.

I WILL not insult common understandings by pointing out its striking utility for the Sick and Wounded. Those who know any thing of the inconveniencies attending washing on board a ship, the unwholesome wet and stench with which the Deck is drenched, and the great number of tubs, buckets, and utensils necessary on such occasions, will readily see the importance of an invention by which all these disagreeable difficulties and noxious circumstances may be obviated, and the ship's company kept completely dry and clean: "a consummation devoutly to be wished!" and which the incomparable and immortal Captain COOK always deemed to be of the utmost consequence, and always recommended and enforced.

It requires little reflection to extend our ideas further, and to see the importance of this invention in warm climates, hospitals, and other situations, where linens, particularly sheets and bedding, are frequently and speedily wanted, and cannot otherwise be speedily supplied. I have done my duty in pointing out these advantages; it remains for those to adopt them, who have it more immediately in their power to testify their regard for the good of their country.

Such is the individual and such the national utility of Washing Mills. But as it is extremely difficult to persuade mankind to reject ancient habits for modern, to whatever advantage, so there are some who ſtart at a new invention, by which drudgery is expelled for labour, and labour reduced to healthy exercise, as if it were an attack on the privileges of the lower orders of the people. It cannot be supposed that so distinguished an invention as this Mill would escape animadversion. It has too much

merit not to excite the attention of Interest and Prejudice. — But I must confess I was not a little surprized to see, in a daily paper* some strictures respecting this article, which, as they contain a reflection on all Patents, it may not be improper to notice.

THE Writer complains of the invention of Washing Mills as being prejudicial to society, or at least to a part of society. The same objection may be made to almost every piece of mechanism that ever was produced. But, as I have already observed, a free and commercial country will always give every encouragement to all arts, especially those by which the necessaries and conveniencies of life are rendered cheaper and more easy of acquisition to all ranks of people. And there surely cannot now be any doubt in determining, that any art or invention by which manual labour is lessened, and the community at large benefited, though to

* The Public Advertiser of the 12th of Nov. 1790.

the

the apparent, or even the real injury of one or more classes of individuals, is extremely valuable, and worthy of support; inasmuch as the interest of a part is not to be put in competition with that of the whole. So far does either legislative or common sense suggest any thing in contradiction to this idea, that every man of ingenuity is invited to exert his talents by the privilege and the protection of a Patent. And where Patents have been legally and justly obtained, it is a sort of injury to attack the inventions; a kind of uncharitableness of which I would not be guilty.

WHETHER the writer was aware of the futility of his argument, I know not: but he seems determined to play on our feelings, and represents the washerwomen as decayed gentlewomen, and as the wives of our soldiers and sailors. Decayed gentlewomen, he knew, we cannot help pitying; and the wives of soldiers and sailors he thought must excite compassion on the approach of

war; and gravely asks, what was to become of them supposing the Washing Mills universally established?—Now, that must depend on their various capacities and inclinations. There is no doubt but that this class of females might find other modes of gaining a livelihood; for I am not so illiberal as to suppose them incapable of all employment but that laborious one of washing.

The Writer's *humanity*, however, is alarmed, till he fancies that he has proved the hardship of these women, and the impropriety of a few individuals getting rich at their expence. But Patentees do not get rich at the expence of the individuals whom their inventions may chance to injure: if they get rich at all it is at the expence of the publick at large, who will always consult their own emolument and advantage; and in a short time the very persons who complain find an equal redress; and when the Washing Mills become universal, few

women

women will be found to exclaim against an invention by which they are relieved from the hardeſt drudgery to which the ſex is expoſed. Surely the Writer's *humanity* is of a ſtrange ſort which would continue the ſex in ſuch a ſlavery, leſt they ſhould find nothing elſe to do. Let him not be alarmed: if the Mills could iron as well as waſh, the quandom dames of the waſh-tub would not be without employment; for, as the writer has probably heard, "Woman's work is never done."—Let him not be ſhocked at the "threatening cloud," which, he ſays, has been raiſed over the heads of the poor waſherwomen. He may depend on it, that if the cloud is not purely imaginary, it will ſoon be loſt in ſunſhine over their heads. The reeking clouds ariſing from their waſh-tubs, and which deſcend in perpetual tears upon them, appear to me to be fraught with more miſchief than any act by which they may be releaſed from the painful and long-continued operation of waſhing by hand.

And let not the writer mistake my sentiments. I am, I trust, as strong a friend to *humanity* as himself; and that is the truest benevolence which embraces the greatest number of objects. As nothing contributes more to the preservation of health than cleanliness, consider the advantages, particularly in the metropolis, and in all great towns, of any means by which cleanliness can be speedily and cheaply acquired. I will not dwell on this, because it is obvious. And when we extend our ideas, and also consider the vast utility of such an invention in schools, in camps, in ships, in hospitals, in all situations where not only health but many lives continually depend on the comfort of cleanliness, and where many are actually lost for want of it, what then will be the sentiment of Humanity? Will ſhe lament over a few individuals, who, as they can wash can also do a thousand other things? — No: she will rather rejoice that they are to be liberated from such hard servitude; and that thousands

thousands are to be relieved in a way much speedier than can be effected by their feeble hands. *Humanity* will rejoice to find the arts and sciences and the powers of mechanism successfully employed in the *common* comforts, conveniencies, and good of mankind: and as health is the greatest of all our blessings, so I cannot but contend that an invention ſo highly contributing to its promotion and preſervation, is to be eſteemed as one of the most inestimable acquiſitions which human ingenuity has accompliſhed in favour of human happiness.

It will readily ſuggest itself to many readers, that I am strangely *partial* to this new Invention; and indeed I am: and when any *impartial* reader has experienced the benefits resulting from it, he would be strangely insensible of his own advantage, and utterly regardless of publick welfare, were not HIS *partiality*, on this occasion, to equal, if not to rival mine. Others will

saga-

sagaciously remark, that I muſt have some particular purpose to answer in this repreſentation. But on *ſuch* minds, MERIT, of whatever deſcription, never makes any impreſſion, unleſs it be to fill them with ſuſpicion, envy, or malignity. For my own part, I wiſh to addreſs myſelf only to the liberal;—the opinions of the illiberal paſs me as the "idle wind, which I regard not."

WHILE objects of ſo much importance can be attained by publick encouragement, ſtrengthened by a Patent, which, as a grant of the Crown ſubſtantiating private property, muſt be held ſacred, let us not only exult in theſe privileges, but deſerve them. Few are the mechanical powers, but infinite are their combinations, each combination producing new effects, and each effect conducive to ſome uſeful purpoſe, or ſome unexpected diſcovery.

So far, then, are Patents from being prejudicial

judicial to the community, that, they will be found of the utmoſt utility, not merely to stimulate ingenuity, but to reward it in a way the most unexceptionable. Nor does the argument, or rather the complaint, that the publick right in useful inventions commences too late, avail any thing. Proper encouragement given to a Patentee will induce him to dispose of his article with as reasonable a profit as it will be possible to obtain it at the expiration of his Patent. If he acts otherwise, the publick do not suffer, he puniſhes himself.

But those who declaim against Patents, and imagine that Fourteen years is too long a term to appropriate to excluſive right, have yet to be told, that this privilege, even for a valuable invention, does not always insure the Patentee an adequate return, much less a splendid acquisition. For it sometimes happens, and indeed not unfrequently, that a great part of the term expires without the invention being sufficiently known to se-

cure public patronage: a consideration that doubtless with-holds many from obtaining Patents whose merits are well entitled to such distinction.

ANOTHER argument in favour of these Privileges, is, that, besides the time taken to make an article known, much more is generally lost in convincing the Publick of its usefulness, in preference to those things which custom has rendered familiar, and to which familiarity, rather than utility, has given value and importance. This is more particularly the case in all complicated mechanism, where great skill has been exerted to produce wonderful effects, and which the "discerning Publick" when they see can hardly believe, and which they regard with suspicion, till repeated conviction has eradicated doubt.

MUCH, I know, has been written on the subject of monopoly; and it is by no means a new thing to hear how inimical a monopoly

poly is to the general prosperity of trade. "Whenever a new trade arises," it is allowed, that the "inventor or introducer "deserves the honour and reward suitable "to his merit. His art," it is well observed, "should be purchased by the pub-"lick, and laid open, so that a number of "rivals in the country where it is invented, "or introduced, may carry it expeditiously "to a necessary height, and be ready to "stock foreign markets as fast as possible. "This," it is added, "would prove more "*nationally advantageous*, than any person "making a temporary monopoly of his art, "and secreting the same to himself."— This argument has plausibility and popularity to recommend it. But, I think, I have, in the preceding Observations, shewn its futility with regard to general inventions. Monopolies, however unpleasant they may be to the community, are requisite to reward ingenuity for such articles as the Government may not think proper to purchase for the purpose of laying open to the publick.

For such articles, I again repeat it, there is no just and adequate mode of securing a proper recompense but by Patent; and that there are many such articles cannot be doubted.

SINCE then there is not at present any other mode, and that the legislature is not likely soon to substitute any other mode, for conferring distinction on those to whom it is due, the multiplicity of Patents cannot, with propriety, be adduced as a circumstance militating against their utility. If it has any, it has a contrary tendency. But these grants are said to occasion much litigation: a remark which may shew the necessity of finding some other way of recompense, but at present amounts to no more than an acknowledgement of a general propensity in mankind to infringe on the rights of each other.

To avoid, as much as possible, all sources of litigation, it is a requisite caution in this

" inventive

" inventive age," that men will not overrate their talents, and imagine that every trifle, which has novelty to recommend it, is worthy of a Patent. Those things scarcely demand a Patent, which, however ingenious, tend only to gratify, in the cheapest and speediest manner, the fashion of the hour. And he is in no likely way to recover his expences, whose invention will not be found of *permanent utility*. Why should he take a Patent for Fourteen Years, whose Invention Fashion may cry down in fourteen days? At present, indeed, it seems to be the fashion to take Patents for almost every thing. But, as in other fashions, so in this, men frequently pay dearly for the distinction, without reaping the profit.

He who is possessed of an article which may be found generally useful, is surely right to procure a Patent, if it is not of consequence sufficient to attract Parliamentary attention; and ſuch, in general, are the productions of those whose time and attention

tion are directed to the study of mechanics. It is almost needless for me to observe, that the SPECIFICATION is the instrument on which depends the value of the Patent. The inventor must be extremely careful to specify only such parts of his invention as are actually new, and to take his Patent for such and such only.

IF he specifies for any thing which has been already in use, it annuls his Patent. He cannot add to the number of the mechanical powers; and the law will not permit him to apply any of them in any way inwhich they have been already applied. If, therefore, the Patentee takes his Patent for such parts of his article as are really and *bona fide* of his own invention, he precludes all possibility of involving himself or any of the same trade in the labyrinths of the law.

SUCH are the general objections which have been made against Patents, and which have given rise to these Observations; objections

jections which, I trust, I have shewn to be fallacious, and such as will not deter the ingenious from soliciting that protection which the legislature affords them.

PERHAPS the moſt obstinate antagonist Ingenuity has to contend with, is Prejudice, assuming a variety of species and insidious forms, and which will oppose even conviction itself. It is at once the shield of Ignorance, and the faulchion of Envy; but it justly afflicts those most who most adore it.

THESE, however, are but the mists which surround Genius; for a moment intercepting his native splendour. But Time and Prejudice, unfavourable Contingency and studied Opposition, must at length shrink before his piercing beams which at once display his own excellence, invigorate science, and illumine the world.

THE END.

BRITISH MUSEUM